4th Kokkos Bootcamp

ECP WBS	STPM12 Kokkos Support
CoPIs	Graham Lo[illegible] (ORNL) Galen Shipman (LANL) Christian Trott, (SNL)
Members	ORNL, LANL, SNL

SAND2018-10837R

Scope and objectives

- Kokkos Support provides cyber resources and conducts training events for current and prospective Kokkos users
- In person training events are organized in various venues providing both generic Kokkos tutorials with lectures and exercises, as well as hands-on work on users applications.

Lectures at ORNL

- About 40 attendees from 10 different institutions participated in the boot camp.
- 11 software projects wanting to use Kokkos were represented.

Impact

- Many ECP projects had members attend Kokkos training events, learning to use Kokkos and optimize there applications better.
- The training material is made available online, allowing potential users outside of ECP to benefit. The training material is also used for events organized outside of the ECP community.

Project accomplishment

- Lectures + Exercises worth about three days of full time training are available, spanning material for beginners to advanced users.
- More than 250 developers have attended a Kokkos training event so far, with about 1/3rd coming from outside ECP and DOE.

Deliverables STPM12 Milestone 4 Report available at https://confluence.exascaleproject.org
Training Material Available at https://github.com/kokkos/kokkos-tutorials
Documentation Available at https://github.com/kokkos/kokkos/wiki

Acknowledgments

This research was supported by the Exascale Computing Project (ECP), Project Number: 17-SC-20-SC, a collaborative effort of two DOE organizations—the Office of Science and the National Nuclear Security Administration—responsible for the planning and preparation of a capable exascale ecosystem—including software, applications, hardware, advanced system engineering, and early testbed platforms—to support the nation's exascale computing imperative.

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia, LLC., a wholly owned subsidiary of Honeywell International, Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA-0003525.

This work was performed under US Government contract DE-AC52-06NA25396 for Los Alamos National Laboratory, which is operated by Los Alamos National Security, LLC, for the U.S. Department of Energy.